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Serial Activists: Political Twitter beyond Influentials and the Twittertariat

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Abstract (150 words)

This paper introduces a group of politically-charged Twitter users that deviates from elite and ordinary users. After mining 20M tweets related to nearly 200 instances of political protest from 2009 to 2013, we identified a network of individuals tweeting across geographically distant protest hashtags and revisited the term serial activists. We contacted 191 individuals and conducted 21 in-depth, semi-structured interviews thematically-coded to provide a typology of serial activists and their struggles with institutionalized power. We found that these users have an ordinary following, but bridge disparate language communities and facilitate collective action by virtue of their dedication to multiple causes. Serial activists differ from influentials or traditional grassroots activists and their activity challenges Twitter scholarship foregrounding the two-step flow model of communication. The results add a much needed depth to the prevalent data-driven treatment of political Twitter by describing a class of extraordinarily prolific users beyond influentials and the twittertariat.

Keywords (up to 10)

Serial activists; Twitter; Social Networks; Influentials; Protest hashtags; Civic participation

Introduction

In this article we report on the online activity of extraordinarily prolific users that tweeted across multiple instances of geographically disparate political hashtags. Common to the 193 occurrences of political unrest reported in this study is the insurgent challenge to the political establishment. This archetype of political involvement lives within a decentralized, increasingly networked, expressive, and firmly agonistic modality of political engagement (Flanagin et al., 2006; Castells, 2009; Bennett and Segerberg, 2013) that is uneasy with traditional politics (Norris, 2002; Dalton, 2006; Zukin et al., 2006). As this new reality of contention has unfolded, it has become a source of anticipation of civic and political rejuvenation prompting anxiety about political disenchantment with party politics and formal associations (Curtice and Norris, 2004; Zukin et al., 2006; Zuckerman, 2014; Micheletti, 2003).

The ensuing debate has led to calls for a survey of political involvement inviting a review of typologies of political participation (Zuckerman, 2014; Freelon, 2014; Tufekci, 2014). In other quarters, it has instigated a popular criticism of politics perceived as arrested in an institutional, hierarchical, and party-based system, often in contrast to contention pinned on social media (Castells, 2009; Loader and Mercea, 2011). To an extent, the debate reflects insurgent political activism going against entrenched conventional politics that has arisen in the aftermath of the 2009 Iranian election and later engulfed the Arab world in 2010 and 2011, forcing rulers out of power in Tunisia, Egypt, Libya, and Yemen (Howard and Hussain, 2013). Those events reportedly inspired the later Indignados movement in Spain and the Occupy demonstrations in the U.S. Ironically, while countries in the MENA region (North Africa and the Middle East) were in the grip of a revolution to usher in representative democracy, many political upheavals in the West occurred as citizens were turning away from mainstream political parties (della Porta, 2013).

The apparent upsurge in contention against the backdrop of arrested politics is evidenced by the multiple instances of political unrest observed in the past four years. The uprisings charted in this article—from the 2009 Iranian election protests to the 2013 protests in Bulgaria, Brazil, and Turkey—have been articulated in a global media ecology of self-publication and scalable mobilization (Castells, 2009). Yet, dissimilarities between contentions appear ideological rather than tactical, as social movements have systematically turned to social media to orchestrate their collective action (Bennett and Segerberg, 2013). It is this observation that stoked our interest in the cross-pollination of insurgent political activism on Twitter, a medium that has proven instrumental to the geographical diffusion of protest (Penney and Dadas, 2014). To put this claim into perspective, in our dataset 17% of users tweeting messages with the hashtag #freeiran, 15% with the hashtag #jan25, and 6% with the hashtag #spanishrevolution also tweeted the hashtag #occupywallstreet.

Accordingly, a considerable portion of users that tweeted #occupywallstreet also tweeted the aforementioned protest hashtags in Iran, Egypt, and Spain.

By way of a mixed-methods design combining a vast repository of Twitter data with interview accounts, this article probes the activity of individuals with prolific engagement across transnational political hashtags whom we designate as serial activists, a term dating from the late nighties and early noughties that referred to users engaging in various political demonstrations online who might not be dedicated activists themselves (Zuckerman, 2008). We innovate on early accounts that loosely applied the term by providing clear boundaries to serial activism and describing the dimensions of magnitude (volume of tweeted messages), space (transnational nature of protest hashtags), and time (protest hashtagging over extended periods of time). Therefore, this study reclaims the term from its earlier iteration and argues that serial activism is not the product of uncommitted click-activists, but encompasses a

complex modality of engagement that often bridges actions online and onsite at multiple protest locations.

This study extends the current body of knowledge by examining the organizational operations of serial activists, their motivation and ability to sustain prolonged investments in collective action, and ponder the significance of their outstanding commitment to contentious politics. In the next section, we review the data-driven literature on the networked communication of contentious politics and critically discuss its fixation on elite users, celebrities, and media pundits that allegedly shape political Twitter. Subsequently, we state the objectives of this study, detail the procedures for data collection, and describe the analytical framework used in the empirical study. The sixth section reports on the interviews with twenty-one serial activists and recounts users' personal and political lives, concerns, and struggles with institutionalized power. The article concludes with a review of political Twitter beyond influentials and the twittertariat—users with an average following and whose comments go largely unnoticed—by contrasting the foregoing characterization of serial activists with the extent and duration of involvement in collective action displayed by such individuals.

Previous Work

User-driven services like Facebook and Twitter have enabled a sharp individualization of participation in collective action (Bennett and Segerberg, 2013). Yet, this development has not foreclosed the emergence of transnational publics galvanized by the prospect of democratization in North-African countries (Papacharissi and Oliveira, 2012), the social justice agenda advocated by the global Occupy movement (Penney and Dadas, 2014), or the mobilizations during the StopKony campaign (Harsin, 2013). Such readiness to insert oneself in the communication of contention may, at an individual level, be prompted by expressive

motives (Walgrave et al., 2012), namely the desire to add one's voice to a collective grievance. While mental dispositions and activists' experience underpin individual sympathy for distant struggles (Tarrow, 2005), the embracement of remote causes is coterminous with a repertoire of online activism supported by a democratic culture (Zuckerman, 2014; Dahlgren, 2006). By any measure, the tension between transnational publics and the self-centered participation promoted by social media (Fenton and Barassi, 2011) throw into question any notion of upscaling protests beyond pre-existing activist circles (Mercea, 2014).

Data-driven literature on online political activism has fallen short of addressing this tension. Individual motivations are subsumed within a movement's overarching political agenda and users are singled-out based on the performance of their communication. As a result, empirical research on political Twitter exhibits a near obsession with elite users, politicians, celebrities, and media pundits and relies on network metrics of centrality to identify the traditional elite, political commentators, and bloggers. This separation between hubs (traditional political elite) and authorities (political commentators and bloggers) depicts the diffusion of information from elite towards ordinary users and is consistent with the two-step flow theory of communication originally proposed by Katz (1957), a theoretical framework often applied to, and arguably consistent with, the information diffusion on Twitter (Wu et al., 2011). In fact, the search for influentials and their number of followers dates back to the seminal studies on Twitter (Kwak et al., 2010; Huberman et al., 2009), which identified influentials by ranking users based on their following and set the research agenda for investigations attempting to identify elite and influential users (González-Bailón et al., 2012; Bakshy et al., 2011).

Departing from this line of research, Cha et al. (2010) compared measures of influence on Twitter and reported that users with high indegree were not necessarily influential in terms of spawning retweets or mentions. González-Bailón et al. (2011) graphed

the network of participants tweeting hashtags associated with the Indignados movement and reported that users who acted as seeds of message cascades tended to be more central in the ensuing activist communication network. Conversely, Penney and Dadas (2014) found that Twitter played a critical role in the rapid formation of a geographically dispersed, networked counterpublic, and Freelon and Karpf (2014) posit the existence of bridging elites, that is, users with large audiences broadcasting messages beyond narrow cliques and filter bubbles. Nonetheless, the dynamics involving elite and ordinary users that tweet protest hashtags remained largely unexplored in the literature, with only a few macroscopic studies of the Twitter network covering the role played by the larger, often passive, Twitter user base (Kwak et al., 2010; Gabielkov et al., 2014).

On the other hand, there is a sizeable body of Twitter literature detailing the circulation of information beyond influentials and elite users during election campaigns (Larsson and Moe, 2012), in social movements (Fernandez-Planells et al., 2014), and around news diffusion (Bastos and Zago, 2013). Although these studies cover important segments of the twittertariat, the vibrant work of serial activists is only gradually being revealed. Bastos et al. (2013a) analyzed hundreds of Twitter information streams and found substantial serial hashtagging, with roughly 70% of contributing users tweeting under at least two hashtags. The study described the underlying network connecting hashtags as constrained by linguistic and thematic communities, with political hashtags as the single exception bridging linguistic cliques, clustering information streams in different languages, and being connected both internally and to each other. These hashtags were popular among prolific users, particularly those tweeting hashtags associated with the Occupy movement, Kony2012, and the Spanish Indignados protests, a first pointer to their character as transnationally followed events.

Bastos et al. (2013b) also reported that message replication with protest hashtags was not correlated with network topology, with retweets cascading mostly from users with an

average following that posted protest hashtags profusely. Instead of depending on user-hubs acting as gatekeepers, message cascades were associated with the intense activity of individuals with relatively few connections. These results underplayed the role of elite users in the diffusion of protest hashtags, as non-influential users played a critical role in the composition and replication of tweets. As with the largely ignored user base of the twittertariat, serial activists are not technically influentials given their relatively small following, but likely play a critical role in message cascades associated with protest hashtags (Bastos et al., 2013b). In the following, we extend these studies by mapping the underlying social graph of this community and describing serial activists as atypical members of the twittertariat. We go on to show that although serial activists constitute a relatively small group of highly engaged individuals, they are likely part of a gradually expanding organic communication contingent providing comprehensive coverage of physical protests.

Objectives

In what follows, we seek to advance foregoing research by identifying the abovementioned serial activists as a group of prolific Twitter users exceptional for their unalloyed investment in the communication of collective action across all corners of the world. As detailed in the next section, serial activists deviate considerably from the profile of influential users investigated in the data-driven Twitter literature, namely celebrities, professional journalists, traditional grassroots activists, and authoritative political pundits. To locate this new actor in the digital media ecosystem, we employed network analysis and summary statistics, followed by in-depth, semi-structured interviews with 21 individuals standing out for their cross-hashtag protest communication. We probed their opinions and experiences with institutionalized power, political activism, and social media practices.

The aims of this study are threefold: first, we describe serial activism by exploring the dimensions of magnitude (volume of tweeted messages), space (transnational nature of protest hashtags), and time (protest hashtagging over extended periods of time). The second aim consists of retrieving first-hand accounts from serial activists reflecting on their modus operandi and driving motivation that contribute and sustain their high levels of cross-hashtag protest communication over time. Thirdly, we reflect on serial activists' opinions and experiences with traditional politics and political activism, thus further illuminating the modalities of civic participation that call into question and hold to account the global political-economic regime eroding representative democracy (Zuckerman, 2014: 155). Thereby, and taking into account the theoretical aspects reviewed, we pursue the following research objectives:

- RO1. Describe serial activists as a group of users that tweet profusely on multiple protest hashtags over extended periods of time;
- RO2. Assess whether serial activists rely on a network of reciprocally connected users to overcome linguistic and national barriers;
- RO3. Identify whether serial activists are driven in their actions by expressive motives;
- RO4. Evaluate whether serial activists provide higher exposure to the political causes and coordinate actions onsite;
- RO5. Inquire into serial activists' assessment of electoral politics and liberal democracy.

Data Collection

For the purpose of this study, we monitored 193 political hashtags (see Appendix: List of Hashtags) from July 2009 to July 2013 through the platform for archiving tweets yourTwapperKeeper. The resulting dataset spans four years of political communication on

Twitter and includes nearly 20 million tweets (19,879,893) posted by 2.5 million unique users (2,657,457). We removed messages from users that tweeted on a single information stream and ended up with 5 million tweets (4,708,537) tweeted by 1.5 million unique users (1,537,342). The most tweeted hashtags in the dataset are #occupy, #iran, #hayuncamino, #spanishrevolution, #occupywallstreet, #occupygezi, #vemprarua, #direngeziparki, #acampadabcn, #acampadasol, #occupyoakland, #changebrazil, #freevenezuela, #occupylsx, #occupyboston, and #occupydc.

The cross-country political movements encompassed in this dataset—such as the Occupy in the US, the Indignados in Spain, and the 2013 protests in Brazil generated no less than 60, 44, and 29 hashtags, respectively. To avoid a disproportional representation of events with multiple hashtags related to the same political movement (Figure 1a), we annotated and classified the 193 protest hashtags into 17 area bands according to the geographic location of the protests and/or the public label of the movement (Figure 1b). The 17 area bands were used to classify the hashtags in the following categories (see Appendix: Hashtags & Groups): European Strike, Occupy, Indignados, Brazil, Vinegar, US, Bulgaria, Gezi, Egypt, Iran, Russia, Venezuela, France, Africa, Mexico, UK, and Romania, thus comprehending a corpus with many of the most prominent political protests in the past years. Figure 1 shows overlapping users across protest hashtags (Figure 1a) and area bands (Figure 1b), with thicker lines representing higher number of users that tweeted on protest hashtags across these areas.

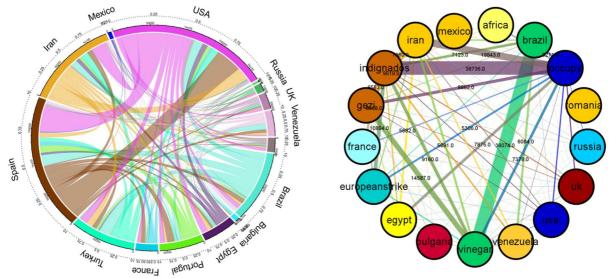


Figure 1a: Users overlapping across national protest hashtags.

Figure 1b: Users overlapping across area bands.

After collating the data, we removed the surplus of messages by users in the same group and ended up with over one million unique postees (1,177,549) that tweeted in more than one area band or group of political movements. The classification of hashtags by area band provided a metric for selecting the cross-section drawn from a population of one million unique users. The filtering method identified postees who were highly active during multiple instances of political unrest across different linguistic and national boundaries. Despite controlling for the geographic distribution of protest hashtags, the majority in the cross-section is originally from, or at the height of their Twitter activism, was based in North America and Western Europe.

We delineated our cross-section as follows: we selected users that tweeted on a minimum of 40 protest hashtags across five different geographic or area bands. We excluded users that tweeted in 40 or more hashtags, but whose activity was restricted to 4 or fewer area bands. We designed this procedure to identify the 200 most prolific Twitter users based on the number of protest hashtags and area bands in which they were active. This is the population we refer to as serial activists. After the removal of invalid Twitter accounts, the final cohort of prospective interviewees comprised the 191 most prolific users (henceforth target population) measured by both the number of posts and area bands they tweeted. This

method introduced in this paper allowed for identifying users that tweeted on cross-event, cross-national political movements. At the same time, it enabled us to pick out 191 individuals exceptionally active during multiple instances of political unrest.

The target population presents clear patterns in the dimensions of magnitude, space, and time (see Appendix: Target Population). The magnitude of their activity is indicated by an average of 100,000 and a maximum of 1 million tweets per account. The spatial dimension is expressed by an average of 53 (\bar{x} =56) hashtags per user—with a minimum of 43 and a maximum of 101—, which is nearly one-third of all political hashtags considered in this study. The average number of area bands tweeted by users was 8 from a total of 17, with a minimum of 5 and a maximum of 13, which again testifies to the spatial coverage of their activity. The temporal dimension, finally, is highlighted by their commitment to covering a vast array of protests over an extended period of four years. Postees in the target population are also long time Twitter users, as the majority of accounts (57%) were created between 2007 and 2010; 42% were set up in 2011 (the year the Indignados and Occupy protests erupted), and only 2% of the accounts were established after 2011 (RO1).

The Twitter following of this population was highly skewed, but relatively low with 2,559 followers on average (\bar{x} =14,400; max=1,243,000) and a median of 1,966 followees (\bar{x} =2,771; max=39,730). These numbers might appear high in comparison to ordinary active Twitter users (the 218 million users that have posted in the last 30 days), which in July 2013, the period we ceased to monitor users for this study, had an average of only 61 followers and 117 followees (Bruner, 2013). However, the number of followers is linearly correlated with the number of tweets, and while the average user tweeted fewer than 600 messages, users with 15,000 tweets or more accounted for 100,000 to 1M followers (Beevolve, 2013). This provides a sharp contrast with the few thousand followers amongst individuals in the target population, who tweeted on average 72,676 (\bar{x} =100,478) messages in the period.

The activity level for the target population was remarkable not only due to the number of demonstrations to which it was linked, but more significantly due to the different locations in which users became remotely immersed. Illustratively, and to emphasize the spatial dimension of this population, one user from Greece tweeted across protest hashtags in locations as varied as their native Greece, Africa, Australia, Brazil, Bulgaria, Canada, Egypt, France, Iran, Spain, Turkey, UK, and the US. In terms of geography, we were unable to identify the location of 63 postees in the target population. The remaining 137 users self-reported their locations to be US (35), Spain (32), Germany (11), UK (9), Brazil (8), Canada (6), Belgium and Italy (4), Australia, Austria, China, France, Greece, Mexico, and Portugal (2), and 1 user from Argentina, Cuba, Egypt, Ireland, Netherlands, and New Zealand (see Appendix: List of Countries).

Finally, we identified and removed from the analysis five automatic posting protocols and four accounts that were protected, suspended, or which had been deactivated. The final cohort comprised 191 users (*target population*) that we contacted with a 140 character Twitter invitation to partake in our research. We communicated with 37 and received a positive response from 21 users agreeing to participate (henceforth *interviewed population*). We compared the user metrics of the target and the interviewed population and found the two cohorts to be consistent. The average number of followers, followers, tweets, and favorites found in the target (*N*=191) and the interviewed population (*N*=21) was similar (see Appendix: Interviewed Population). Figure 2 shows the summary statistics for the target (a) and interviewed (b) populations, with resembling skewed distributions across the two samples.

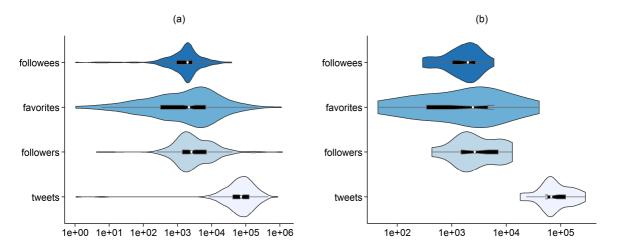


Figure 2: Statistics of (a) target population (N=191) and (b) interviewed population (N=21) of serial activists.

Data Analysis

We subsequently queried Twitter API to reconstruct the network of followers and followees of the target population. We identified reciprocal and asymmetrical relationships between serial activists and found that users in the target population were connected to at least one other user in the same group (RO1). One user was connected to more than half of the target population and 15 users presented more than 50 connections to other serial activists. The average number of interconnections in the target population was fourteen (\bar{x} =14, \bar{x} =8), thus showing that the group is interconnected right at the first level of the social network. These figures indicate that serial activists form a tightly-connected community, often following each other and monitoring each other's Twitter stream. Moreover, the interviewed population is seemingly an organic subnet of the target population, as 87% of the 191 serial activists were connected to the interviewed population (see Figure 3b for the subnet of reciprocal relations) and the network structure of the interviewed (N=21) and the target (N=191) populations present similar clustering coefficient (0.2), closeness (2.7 and 2.8), and eigenvector centrality (0.2 versus 0.1).

Figure 3a shows the graph of the target and interviewed populations comprising over 600,000 nodes and nearly 1.5 million connections (click on the figure for zooming). The plot

depicts the linguistic communities, with Francophone, Hispanophone, and Anglophone cliques that were connected both internally and to each other. The dark blue cluster constitutes 22% of the graph and includes users that tweeted predominantly Spanish hashtags. The dark red clusters comprise 11% of the graph and include users that tweeted English hashtags. The dark and the light green clusters comprehend another 20% of the graph with almost exclusively English-speaking users. The yellow cluster comprehends 7% of the graph and comprises users associated with Arabic-speaking countries. Finally, the red cluster is of Italian and French-speaking users, with 4.6% of the graph, and the blue cluster is of Portuguese-speaking users, with 4.5% of the graph. The cross-over between groups suggests that serial activists rely on peer networking to overcome linguistic and national barriers (RO2).

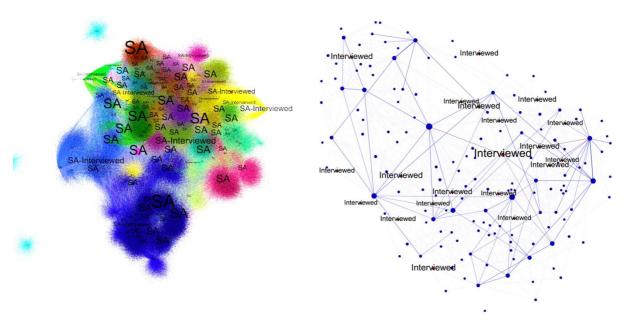


Figure 3a: Social graph of the target and interviewed populations (600,000 nodes and 1.5 million edges)

Figure 3b: Subnet of reciprocal connections among the target and the interviewed populations

Below we report on respondent interviews (Lindlof and Taylor, 2010) conducted from April to July 2014 with the 21 serial activists who replied favorably to our invitations to participate in the research project. The choice of method was prompted by the observation that cognate research has stopped short of this step, restricting analysis to the level of aggregate observations that offer no insight into rich, individual-level understandings of

protest communication on Twitter (González-Bailón et al., 2012; Bastos et al., 2013b; Bastos et al., 2013a). This interview variety represents an opportunity to probe into subjective meanings, retrace circumstances that impact on participant opinions and actions while also providing enough latitude for reflections on salient attitudes and attendant interpretations of one's involvement in cross-national contentious communication. Thus, we retrieved insights into the motivations and purposes that drove the high-volume posting, espoused collective identities, the broader context and activist histories of the interviewees.

We need also note that this data gathering method raised particular ethical challenges stemming from our preexisting knowledge of user activity acquired through statistical disambiguation. Despite the touted novelty of big data analytics as a rich source of user information that is both self-generated and automatically recorded by network services such as Twitter (Boyd and Crawford, 2012), we were able to draw on a rich cache of experience regarding the ethical pitfalls of qualitative online research. Specifically, we sought to preserve individual anonymity at all stages and across all data examined in the investigation. For that reason, we assigned pseudonyms to the participants and quoted the interviews only when the content could not be traced back to the author via the use of a search engine (Trevisan and Reilly, 2014). Our intended outcome was an ethnographic embedment of big data observations in the lifeworld of the research participants, a move that bridges the qualitative-quantitative rift in the social sciences (Trevisan and Reilly, 2014).

To maximize the benefits of our mixed methods design, we pursued a triangulation of our data and analysis procedures (Sieber, 1973). Accordingly, the Twitter data-scraping led into the sampling method through which we derived the target population. Secondly, the activist interviews—held in English, Spanish, and Portuguese—were translated into English and subsequently processed with a combination of thematic (Huberman and Miles, 1984) and typological interview clustering procedures. Due to the amorphous nature of the answers,

responses to open-ended questions were transcribed in full, the material was coded in thematic areas, and conclusions were drawn once saturation was reached among the various interviews (Boyatzis, 1998).

Interview Findings

The profile of serial activists offers a sharp contrast to the demographics of social media. While Twitter is especially appealing to urban adults aged 18-29 and includes a very small portion of senior individuals age 50 or older (Pew Research Center, 2013: 4), the average age of the interviewed population was 45 (\bar{x} =47.29). Two age clusters were immediately noticeable in the interviewed population: the mature young age 30-44 (48% of interviewees) and the senior individuals aged 45 or older (52%).³ In fact, a third of respondents were older than 55 and a quarter of the interviewees reported being 60-years or older. Therefore, the demographics of our interviewed population differ considerably to the Twitter user base, with the youngest individual interviewed being 33 years-old; one-fifth of respondents aged 62 or older; and the average age of the population being 45. From the 21 respondents, four reported impaired physical mobility, temporary or otherwise, during the time of the events.

Gender and level of education are equally distributed between males (*N*=10) and females (*N*=11) and between individuals with secondary (*N*=10) and tertiary (*N*=11) education.⁴ While age, gender, and education are evenly divided between two groups, profession and income highlighted dissimilar groups. Most interviewees reported a low income by choice or circumstance (64% of respondents)⁵ and a professional background in the IT industries (43% of respondents).⁶ Another clear pattern is the influence and reach of Occupy movements on the set of protests monitored in this study. The majority of respondents were based in North America (52%) and Europe (38%) during the time of the events, with only 14% in developing countries. All respondents were based in countries that

held Occupy-like demonstrations. More noticeably, respondents were often located in cities that experienced prominent, dynamic, and long-lasting Occupy camp-outs.⁷

The significant investment of time in Twitter communication bridged the abovementioned divides and provides elements to investigate RO1. Consistent with the intense activity of the target population, interviewees acknowledged posting copious amounts of messages. Indeed, one user believed to have posted '55K tweets in support of the various protest movements' (George, 2014). Respondents emphasized their Twitter activity would wax and wane in intensity following patterns of unrest or action on the ground, with daily estimates varying from a few dozens, a few hundreds, and over 1.2K tweets in a busy day, particularly during the Occupy and the Arab Spring, when 'it would be easy to post 500 tweets a day' (Sam, 2014). Five respondents mentioned being frequently timed out (*Twitter jail*) due to their high activity; four reported sleep deprivation, and three respondents worked in teams of up to three people taking turns to cover all hours of the day.

'I lived on Twitter. It was basically another appendage and from the time I was awake to the time I went to sleep I was constantly checking it and every notification that went off I had to respond immediately. Around the New Year I took one day off of Twitter—not even 12 hours. People tweeted me and because they didn't get a reply they thought I'd been kidnapped by the government and sent people to my house to make sure I was okay.' (Peter, 2014)

We approached RO2 by inquiring on which resources users had relied to cover protests across different linguistic communities, and whether they had anything in common with other people that communicated about the same protests on Twitter. From the twenty-one respondents, six mentioned using Google Translate to help cross language barriers while one third of the interviewees (7 users) were bilingual or multilingual to various degrees.

Respondents emphasized the importance of moving across linguistic communities and

identified language skills as critical to the effective communication and coordination of protests. Four of the interviewees tweeted exclusively in English and described the language as a *lingua franca*; two created dedicated Twitter accounts for each linguistic community to which they posted; two reported retweeting material in a language they did not understand but whose source they trusted; and one third of the interviewees (7 users) stressed the importance of finding reliable sources onsite who were relaying information in English.

Except for a single user, interviewees overwhelmingly agreed that they were in contact and shared common interests with other users tweeting the protests. In fact, they emphasized the role of an online community in supporting events onsite. Many serial activists reported having met other activists in person or 'have become personal friends over the years' (Roger, 2014). Common to all interviewees was an emphasis on community-building, shared values, and the common objective 'to address or redress perceived wrongs' (George, 2014). Another interviewee met with a colleague for the first time during an interview, and despite considerable different political stances and personal backgrounds, they found themselves completing each other's responses. According to Thomas (2014), 'not once during the interview we disagreed about a thing. It was interesting to see how I could connect so well with someone I didn't know at all.'

We approached RO3 by inquiring how activists chose and the extent to which they identified with the protests they tweeted about. Respondents were mostly driven by a sense that 'the struggle is collective' (Jonas, 2014) and by expressive motives: 'the things that make me angry are the things I tweet about' (Antonia, 2014). When probed whether personal interests were intertwined into the protests, all but three respondents downplayed instrumental motives (Walgrave et al., 2012) and the notion that they were guided by an urge to effect immediate change in the world. Even when interviewees claimed the cause had a personal resonance, the motivation was unmistakably expressive, as the action was carried

out for its own sake and the act of protesting was gratifying on its own terms: 'it's both my personal ties and my beliefs; I believe in human rights for everyone' (Jade, 2014).

Identification with the tweeted causes was reported across the entire set of interviews with multiple key referents including anti-austerity, open source philosophy, free software, democracy, justice, and equality, as well as high-minded objectives like 'the common goal of liberation worldwide, regardless of the oppressive power' (Roger, 2014), and a broad engagement with online activist groups. Respondents acknowledged a complete affinity with the causes they tweeted despite any language barriers (George, 2014). Moreover, prevalent among interviewees was an identification with other users which was positively related to a psychological sense of community. Illustratively, Valerie (2014) asserted that 'we share a mindset and personality type: opinionated and not so self-involved. We're the anti-selfie mob,' while on the same topic Thomas (2014) contended:

'I never thought I could identify with what's happening on the ground by watching live streams, but if you cannot impersonate those people it's very difficult to keep up the work. It's an immersive experience and suddenly it's impossible for your brain to separate yourself from what is happening on the ground. It's an emergent collective identify that binds us all together. When someone from London or Brussels or Madrid feel interconnected they'll give support and organize protest and do solidarity acts. It's more than just retweeting and going to bed. You're doing that because it affects you whether you're there or not.'

The context collapsing of online and onsite protest actions described by Thomas sheds light on RO4. We queried interviewees about the impact of their Twitter communication on the protests and their answers overwhelmingly emphasized their personal role in providing extensive and often live coverage of physical protests. George (2014), one of the interviewees, avowed that his primary job was 'to move information and make sure it was

getting out so people could make decisions'. In fact, 57% of respondents foregrounded their role as information clearinghouses curating detailed information about indigenous struggles, austerity, free software, human rights, climate change, and democracy. They became legitimate sources of news in real time that could not be found elsewhere. As Peter (2014) telling pointed out:

'Live stream seems to be what builds on a lot of these protests. It allows people who can't be there to be part of that too. (...) If somebody wanted to follow a couple of people and didn't want to make Twitter their entire existence, they could follow my feed. I was pulling from enough sources that they could just follow me and get the gist, the flavor of what was going on. I could be the central source of information for them if they followed me.'

Interviewees further stressed the role of Twitter in providing higher exposure to embodied protest actions. Recounting a fraught activist campaign in which she played an important part, Jade (2014) said that 'on the boat to Gaza, those of us making use of social networking were able to provide an birds eye view into a situation that people would otherwise not have had access to.' Another respondent crafted hashtags to cover the struggle of indigenous people in the Amazonas whose calls remained unanswered by the local press until the BBC covered the struggle (Isabel, 2014). The personal cost for the vocal Twitter endorsement of protest was very dear for some. As a result of her outspoken and profuse tweeting in support of the Gezi Park demonstrations, Julia (2014) received 'countless death threats and endless accusations' and was eventually forced to leave Turkey.

In the end, only four interviews had no stories bridging online and onsite protests, while five of them provided detailed accounts on how their online activity helped coordinating actions onsite. Describing his place on the online-onsite continuum, Sam (2014) asserted that 'there are people on the ground, which is the Occupy or Gezi Park or whatever,

and then there are the anonymous people who are like air support. You've got your foot soldiers and then you've got air support.' Similarly, Peter (2014) explained how he helped steer on-site actions via Twitter: 'social media is great for communication and intelligence during protests and marches. People at home would listen to the feed from the police scanners and feed that to me during the livestreams.' Kate (2014) spoke of the profound investment in the protests she tweeted and the concern for the welfare of onsite contacts. In her words:

'There was a youth when the shooting broke out in Tahir square and it turned into a terrifying pandemonium. He had been born and brought up in an English speaking country but he was back in the Middle East with his girlfriend and they got split up. I'd been following him and it was obvious he was terrified, so I kind of stepped in and said it's alright, it's okay I'm here, what do you need? I helped to calm him down. He found a toddler and everyone was running backwards and forwards and he didn't know what to do. We managed to get him to this house and they were treating him at the barracks. I managed to get in touch with the toddler's relatives while we're trying to find a place to reunite the toddler with his parents and get him out of there. We did that and the wee boy got taken to a mosque where there was a children's charity that kept him there until his parents came. We were sitting there watching Aljazeera and looking at Twitter and telling them what road was blocked, which streets had gunfire in them, which streets to stay away from, and what streets the police had people in handcuffs, go down that street, or go down another one.'

Lastly, we explored RO5 by asking respondents about their stance on electoral politics, their general assessment of contemporary democracy, whether they saw themselves as politically active, and whether they were or had been members of political parties or NGOs. Respondents held overwhelmingly negative views towards traditional politics with just three of them asserting the importance of voting. The interviewees described electoral

politics as 'a farce,' 'corrupt,' 'limiting,' 'pro-corporate,' 'non-representative,' 'oligarchic,' 'broken,' 'useless,' 'sick,' and 'dirty.' The assessment of contemporary democracy fared worse, with only one interviewee upholding a neutral outlook. The remainder referred to liberal democracy as 'not much of a democracy,' 'unrepresentative,' 'increasingly fragile,' 'pro-corporations,' 'boring,' 'irrelevant,' 'lost,' 'dead,' 'outdated,' and 'totally owned by puppeteers and gangsters.' In his singing assessment, Thomas (2014) contended that:

'A regeneration of political parties is needed. There is a lack of representativity from the elected servants. It doesn't seem capable to reinvent itself and it's failing to use the available technology to improve itself. The next step after occupying the information landscape is to occupy the parliament. I don't think representative democracy is going to die anytime soon. We need to conquer it and occupy it.'

Yet, remarkably, two-thirds of the interviewees described themselves as politically active (N=14) while the other third (N=7) depicted themselves as non-political persons, likely a result of interviewees' conflation of politics with the party system. Affiliation to political parties was uncommon, with the majority of respondents (N=18) reporting no affiliation to any political party. The three respondents with party membership were affiliated to minority political parties (i.e. Green Party and Peace and Freedom Party in the US and the Red Ciudadana Partido X in Spain). On the other hand, involvement with NGOs, institutionalized or otherwise, was evenly distributed across interviews. Half of respondents (N=10) were directly or indirectly affiliated to NGOs or were a member of informal groups, while the other half (N=11) held no such commitment.

Respondents' political views displayed a strong alignment with the ethos and precepts of the Occupy movement and the grassroots tech groups Anonymous and WikiLeaks. In fact, when asked about their assessment of conventional politics, the majority of respondents (*N*=12) directly acknowledged being influenced or directly drawn from Anonymous, Occupy,

and WikiLeaks. Jonas (2014) provided a rounding view of the prevalent ideological disposition:

'I don't fight for the proletariat, the class struggle, the feminism, the ecologism, or the anarchism. For me these are private values and part of a single political identity. My political reference is not [Karl] Marx or [Mikhail] Bakunin. My political reference is my mother. I'm not fighting to reach out for my friends that are communists, feminists, or anarchists. I'm fighting to reach out for the 99%. I'm far more inclined to the philosophy of Anonymous, which is focused on public values like justice and freedom instead of private values associated with an identity.'

Conclusion

In this article we documented, described, and theorized the activity, motivations, and political views of a group of politically-charged Twitter users. We reclaimed the term serial activists from the diluted and loose phraseology that marked early accounts of this group by recounting their extraordinary protest communication on Twitter and highlighting the continued commitment to contentious politics. The combination of statistical disambiguation and qualitative analysis allowed us to overcome the novelty of big data analytics and identify users that deviate from elite and traditional grassroots activists. We described serial activism by the dimensions of magnitude (volume messages), space (transnational protest hashtagging), and time (activity over extended periods of time) and reflected on serial activists' opinions and experiences with both contentious and traditional politics. In the last instance, we believe the results presented in this study provide evidence that the dynamics of political Twitter extend beyond the usual emphasis on elite users, celebrities, media pundits, and traditional grassroots activists.

The social network analysis and the first-hand accounts from serial activists provided a comprehensive foundation on which to discuss our research objectives. First, we showed that serial activists constitute a group of users tweeting profusely on multiple protest hashtags over extended periods of time. Second, we found that serial activists rely on translation tools, language skills, and on peer networks to overcome linguistic and national barriers. Third, we confirmed these activists are driven in their actions by expressive motives. Fourth, we documented how serial activists ensured higher exposure for activist causes and aided the coordination of onsite actions. Fifth, we established that serial activists resisted engaging or supporting electoral politics and liberal democracy. Lastly, we described the characteristics of the interviewed population, which by-and-large was part of a lower income bracket, much older than the average Twitter demographics, and shared a professional background in the IT industries. To our knowledge, this is the first research to generate a detailed and in-depth report on these users that have been mistakenly depicted as uncommitted, short-burst activists.

We established that serial activists resort to Twitter for the effective communication and coordination of collective action. Contrary to preceding accounts pertaining to this group (Zuckerman, 2008), the scope and duration of immersion in collective action evidenced in this study purports to a high and sustained level of activism. Another prominent characteristic of this population was the influence of values associated with the Occupy movement. The significance of this observation is put in relief by the serial activists' resistance to embracing traditional politics and liberal democracy in a manner consistent with previous investigations on contemporary forms of civic participation (Zuckerman, 2014). By undertaking the aforesaid vital activist tasks (Bennett and Segerberg, 2013) while exhibiting a lack of commitment to established civic or political grassroots communities, serial activists build a community with users that are often geographically apart, but ideologically proximate.

To conclude, serial activists present the possibility that social media might have expanded the capacity of ordinary actors and enabled a transformation in the demographics of revolt. Perhaps ironically, the technologies that have threatened traditional solidarities by entrenching atomized lifestyles also supported the production of renewed forms of collective resistance. Further research may extend our multimethod approach, taking our analysis as a starting point for the verification of serial activism and its relative prevalence across different modalities of political participation. Ultimately, the panoply of practices exhibited by serial activists may constitute a cumulative example of civic agency and attendant communicative competencies supporting political discourse and democratic values (Dahlgren, 2006: 273), which however deviate from traditional notions of civic conduct conducive to dutiful participation in traditional politics.

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Notes

¹ A Twitter message including a link to the project website and an invitation to take part in a research interview was sent out to the 191 prospective interviewees.

² Institutional Review Board (IRB) approval was obtained for the research design, data management plan, and participant informed consent forms stipulating the terms of the interview. This form noted that the individuals could discontinue participation at any point. All participants agreed to the terms and none terminated the interview.

³ Interviewees who declined to disclose the exact age indicated an age interval (e.g. 15-29). Three users provided such interval, in which case we took the mean value to report the average distribution per age group.

- ⁵ Out of 21 interviewees, 14 self-identified as low-income earners or reported having no income at all; five were middle-income earners; and only three identified themselves as high-income earners. One individual reported having middle to high income, for which case we registered both responses.
- ⁶ Nine of the respondents worked in various capacities in the Information Technology area. From the remaining 12 interviewees, two were pensioners and one was a caregiver.
- ⁷ Fifty-two percent of respondents were based in North America, with 6 in the USA, 4 in Canada, and 1 in Mexico. The remaining 48% is divided as follows: 8 activists in Europe, with 3 in the UK and 5 in the Netherlands, Sweden, Belgium, Spain and Greece. The last 2 respondents were based in Turkey and Brazil. Respondents were based mostly in cities that experienced Occupy protests, particularly San Francisco, Toronto, London, and European capitals.

References

- Bakshy E, Hofman J, Mason W, et al. (2011) Everyone's an Influencer: Quantifying

 Influence on Twitter. *Proceedings of the Fourth ACM International Conference on*Web Search and Data Mining. Hong Kong, China: ACM, 65-74.
- Bastos MT, Puschmann C and Travitzki R. (2013a) Tweeting across hashtags: overlapping users and the importance of language, topics, and politics. *Proceedings of the 24th ACM Conference on Hypertext and Social Media*. Paris, France: ACM, 164-168.
- Bastos MT, Raimundo R and Travitzki R. (2013b) Gatekeeping Twitter: message diffusion in political hashtags. *Media, Culture & Society* 35: 260-270.
- Bastos MT and Zago G. (2013) Tweeting News Articles: Readership and News Sections in Europe and the Americas. *SAGE Open* 3.
- Beevolve. (2013) An Exhaustive Study of Twitter Users Across the World. (accessed December 21, 2013).

⁴ The highest level of education reported by interviewees was High School (*N*=5), Some College (*N*=5), Bachelor's Degree (*N*=7), Master's Degree (*N*=2), and Doctoral Degree (*N*=2).

- Bennett WL and Segerberg A. (2013) *The Logic of Connective Action: Digital Media and the Personalization of Contentious Politics*, Cambridge: Cambridge University Press.
- Boyatzis RE. (1998) Transforming qualitative information: Thematic analysis and code development: Sage.
- Boyd D and Crawford K. (2012) Critical Questions for Big Data. *Information,*Communication & Society 15: 662-679.
- Bruner J. (2013) Tweets loud and quiet. O'Reilly Radar. (accessed December 21, 2013).
- Castells M. (2009) Communication power, Oxford: Oxford University Press.
- Cha M, Haddadi H, Benevenuto F, et al. (2010) Measuring User Influence in Twitter: The Million Follower Fallacy. *International Conference on Weblogs and Social Media*.

 George Washington University: Association for the Advancement of Artificial Intelligence.
- Curtice J and Norris P. (2004) e-politics? The impact of the internet on political trust and participation. *British Social Attitudes: the 21st. report*.
- Dahlgren P. (2006) Doing citizenship: The cultural origins of civic agency in the public sphere. *European journal of cultural studies* 9: 267-286.
- Dalton RJ. (2006) Citizen politics: Public opinion and political parties in advanced industrial democracies, Washington DC: CQ Press.
- della Porta D. (2013) Can Democracy Be Saved: Participation, Deliberation and Social Movements, Cambridge: Polity.
- Fenton N and Barassi V. (2011) Alternative Media and Social Networking Sites: The Politics of Individuation and Political Participation. *The Communication Review* 14: 179-196.
- Fernandez-Planells A, Figueras-Maz M and Pàmpols CF. (2014) Communication among young people in the #spanishrevolution: Uses of online–offline tools to obtain information about the #acampadabcn. *New Media & Society* 16: 1287-1308.

- Flanagin AJ, Stohl C and Bimber B. (2006) Modeling the Structure of Collective Action.

 Communication Monographs 73: 29-54.
- Freelon D. (2014) Online Civic Activism: Where Does It Fit? *Policy & Internet* 6: 192-198.
- Freelon D and Karpf D. (2014) Of big birds and bayonets: hybrid Twitter interactivity in the 2012 Presidential debates. *Information, Communication & Society*: 1-17.
- Gabielkov M, Rao A and Legout A. (2014) Studying Social Networks at Scale: Macroscopic Anatomy of the Twitter Social Graph. *ACM Sigmetrics 2014*. Austin, United States.
- González-Bailón S, Borge-Holthoefer J and Moreno Y. (2012) Broadcasters and Hidden Influentials in Online Protest Diffusion. *American Behavioral Scientist*.
- González-Bailón S, Borge-Holthoefer J, Rivero A, et al. (2011) The Dynamics of Protest Recruitment through an Online Network. *Sci. Rep.* 1.
- Harsin J. (2013) WTF was Kony 2012? Considerations for Communication and Critical/Cultural Studies (CCCS). Communication and Critical/Cultural Studies 10: 265-272.
- Howard PN and Hussain MM. (2013) Democracy's Fourth Wave?: Digital Media and the Arab Spring, Oxford: Oxford University Press.
- Huberman B, Romero D and Wu F. (2009) Social networks that matter: Twitter under the microscope. *First Monday* 14.
- Huberman M and Miles MB. (1984) Qualitative data analysis, Thousand Oaks: Sage.
- Katz E. (1957) The Two-Step Flow of Communication: An Up-To-Date Report on an Hypothesis. *Public Opinion Quarterly* 21: 61-78.
- Kwak H, Lee C, Park H, et al. (2010) What is Twitter, a social network or a news media?

 19th International Conference on World Wide Web. New York, NY, USA: ACM,
 591-600.

- Larsson AO and Moe H. (2012) Studying political microblogging: Twitter users in the 2010 Swedish election campaign. *New Media & Society* 14: 729-747.
- Lindlof TR and Taylor BC. (2010) *Qualitative communication research methods*, London: Sage.
- Loader BD and Mercea D. (2011) Networking Democracy? *Information, Communication & Society* 14: 757-769.
- Mercea D. (2014) Towards a Conceptualization of Casual Protest Participation: Parsing a Case from the Save Roşia Montană Campaign. *East European Politics & Societies* 28: 386-410.
- Micheletti M. (2003) *Political Virtue and Shopping: Inviduals, Consumerism, and Collective Action*, Basingstoke: Palgrave Macmillan.
- Norris P. (2002) *Democratic phoenix: Reinventing political activism*, Cambridge: Cambridge University Press.
- Papacharissi Z and Oliveira MdF. (2012) Affective news and networked publics: The rhythms of news storytelling on #Egypt. *Journal of Communication* 62: 266-282.
- Penney J and Dadas C. (2014) (Re)Tweeting in the service of protest: Digital composition and circulation in the Occupy Wall Street movement. *New Media & Society* 16: 74-90.
- Pew Research Center. (2013) The Demographics of Social Media Users, 2012. In: Duggan M and Brenner J (eds). Washington, D.C.: Pew Research Center's Internet & American Life Project.
- Sieber SD. (1973) The integration of fieldwork and survey methods. *American Journal of Sociology*: 1335-1359.
- Tarrow S. (2005) The new transnational activism, Cambridge: Cambridge University Press.

- Trevisan F and Reilly P. (2014) Ethical dilemmas in researching sensitive issues online: lessons from the study of British disability dissent networks.
- Tufekci Z. (2014) The Medium and the Movement: Digital Tools, Social Movement Politics, and the End of the Free Rider Problem. *Policy & Internet* 6: 202-208.
- Walgrave S, Wouters R, Van Laer J, et al. (2012) Transnational Collective Identification:

 May Day and Climate Change Protesters' Identification with Similar Protest Events in

 Other Countries. *Mobilization: An International Quarterly* 17: 301-317.
- Wu S, Hofman JM, Mason WA, et al. (2011) Who Says What to Whom on Twitter. 20th international conference on World Wide Web. New York: ACM, 705-714.
- Zuckerman E. (2008) Pros and Cons of Facebook activism. *My heart's in Accra*. Internet Archive.
- Zuckerman E. (2014) New Media, New Civics? Policy & Internet 6: 151-168.
- Zukin C, Keeter S, Andolina M, et al. (2006) A new engagement? Political participation, civic life, and the changing American citizen, Oxford: Oxford University Press.